IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (Currently Amended) A computer-readable memory medium <u>storing</u> ~~comprising~~ program instructions executable to:

<u>in</u> ~~display~~ source code of a software program, <u>display a first function call</u> ~~wherein the source code is~~ written in a text-based programming language that can be compiled into executable code, wherein the ~~source code includes a~~ first function call ~~that~~ takes a first parameter;

<u>programmatically</u> ~~dynamically~~ determine ~~a plurality of~~ <u>one or more</u> valid parameter values for the first parameter of the first function call <u>by invoking software for a measurement device in order to determine one or more resources of the measurement device, wherein each of the one or more valid parameter values represents a respective resource of the one or more resources;</u>

<u>position a cursor on the first function call displayed in the source code in response to user input;</u>

<u>in response to user input requesting to select a parameter value, determine that the cursor is positioned on the first function call and</u> display a graphical user interface for selecting a parameter value for the first parameter of the first function call, wherein the graphical user interface ~~for selecting the parameter value~~ visually indicates the ~~plurality of~~ <u>one or more</u> valid parameter values<u>;</u> ~~, wherein the graphical user interface for selecting the parameter value is displayed concurrently with the source code;~~

receive user input to the graphical user interface to select a first parameter value from the ~~plurality of~~ <u>one or more</u> valid parameter values<u>, wherein the first parameter value represents a first resource of the measurement device;</u> and

automatically <u>modify the first function call displayed in the source code of the software program by including</u> ~~include~~ the first parameter value in the first function call ~~in the source code of the software program~~ in response to the user input selecting the first parameter value, wherein automatically including the first parameter value in the first

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function call ~~comprises automatically updating the displayed source code to display the~~ ~~first parameter value within the first function call, wherein automatically including the~~ ~~first parameter value in the first function call~~ aids a user in ~~editing~~ modifying the first function call to reference the first resource of the measurement device.

2-8.   (Canceled)

9.   (Currently Amended) The computer-readable memory medium of claim 1, wherein the measurement device comprises a GPIB device;

wherein said ~~dynamically~~ determining the ~~plurality of valid parameter values~~ ~~comprises dynamically~~ one or more resources of the measurement device comprises determining one or more GPIB resources of the GPIB device;

wherein the first parameter value ~~comprises~~ represents a first GPIB resource of the GPIB device;

wherein said automatically including the first parameter value in the first function call comprises automatically configuring the first function call with a reference to the first GPIB resource.

10.   (Currently Amended) The computer-readable memory medium of claim 1, wherein the measurement device comprises a Visa device;

wherein said ~~dynamically~~ determining the ~~plurality of valid parameter values~~ ~~comprises dynamically~~ one or more resources of the measurement device comprises determining one or more Visa resources of the Visa device;

wherein the first parameter value ~~comprises~~ represents a first Visa resource of the Visa device;

wherein said automatically including the first parameter value in the first function call comprises automatically configuring the first function call with a reference to the first Visa resource.

11.   (Currently Amended) The computer-readable memory medium of claim 1, wherein the measurement device comprises a DAQ device;

wherein said ~~dynamically~~ determining the ~~plurality of valid parameter values comprises dynamically~~ one or more resources of the measurement device comprises determining one or more DAQ resources of the DAQ device;

wherein the first parameter value ~~comprises~~ represents a first DAQ resource of the DAQ device;

wherein said automatically including the first parameter value in the first function call comprises automatically configuring the first function call with a reference to the first DAQ resource.

12.   (Currently Amended) The computer-readable memory medium of claim 1, wherein said ~~dynamically~~ determining the ~~plurality of~~ one or more valid parameter values comprises ~~dynamically~~ determining one or more universal resource locators (URLs) that represent the one or more resources of the measurement device;

wherein the first parameter value comprises a first URL of the one or more URLs;

wherein said automatically including the first parameter value in the first function call comprises automatically configuring the first function call with a reference to the first URL.

13.   (Currently Amended) The computer-readable memory medium of claim 1, wherein the ~~further comprising~~ program instructions are further executable to:

receive user input specifying filtering criteria for the parameter values;

wherein the graphical user interface visually indicates only a subset of the valid parameter values, wherein the subset is determined based on the specified filtering criteria.

14-19. (Canceled)

20.   (Previously Presented) The computer-readable memory medium of claim 1,

wherein the source code is displayed in a first window;

wherein said displaying the graphical user interface comprises displaying the graphical user interface in a separate window apart from the first window.

21.   (Previously Presented) The computer-readable memory medium of claim 1,

wherein the source code is displayed in a first portion of a first window;

wherein said displaying the graphical user interface comprises displaying the graphical user interface in a second portion of the first window.

22.   (Currently Amended) The computer-readable memory medium of claim 1,

wherein the graphical user interface displays the ~~plurality of~~ one or more valid parameter values as a list;

wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select the first parameter value from the list.

23.   (Currently Amended) The computer-readable memory medium of claim 1,

wherein said programmatically ~~dynamically~~ determining the ~~plurality of~~ one or more valid parameter values includes programmatically ~~dynamically~~ determining one or more property values;

wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select a first property value;

wherein the first property value is automatically included in the first function call in response to the user input selecting the first property value.

24.   (Currently Amended) A computer-readable memory medium storing ~~comprising~~ program instructions executable to:

in ~~display~~ source code of a software program, display a first method call ~~wherein the source code is~~ written in a text-based programming language that can be compiled

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into executable code, wherein the ~~source code includes a~~ first method call ~~that~~ takes a first parameter;

programmatically determine ~~a plurality of~~ one or more valid parameter values for the first parameter of the first method call ~~based on a hardware configuration of a computer system~~ by invoking software for a measurement device in order to determine one or more resources of the measurement device, wherein each of the one or more valid parameter values represents a respective resource of the one or more resources;

position a cursor on the first method call displayed in the source code in response to user input;

in response to user input requesting to select a parameter value, determine that the cursor is positioned on the first method call and display a graphical user interface for selecting a parameter value for the first parameter of the first method call, wherein the graphical user interface ~~for selecting the parameter value~~ visually indicates the ~~plurality of~~ one or more valid parameter values; ~~, wherein the graphical user interface for selecting the parameter value is displayed concurrently with the source code;~~

receive user input to the graphical user interface to select a first parameter value from the ~~plurality of~~ one or more parameter values, wherein the first parameter value represents a first resource of the measurement device; and

automatically modify the first function call displayed in the source code of the software program by including ~~include~~ the first parameter value in the first method call ~~in the source code of the software program~~ in response to the user input selecting the first parameter value, wherein automatically including the first parameter value in the first method call ~~comprises automatically updating the displayed source code to display the first parameter value within the first method call, wherein said automatically including the first parameter value in the first method call~~ aids a user in ~~editing~~ modifying the first method call to reference the first resource of the measurement device.

25.   (Canceled)

26.   (Currently Amended) A system comprising:

~~a processor;~~

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one or more processors;

a display device;

a measurement device; and

[[a]] memory ~~coupled to the processor, wherein the memory stores~~ storing program instructions;

wherein the program instructions stored in the memory are executable by the ~~processor~~ one or more processors to:

~~in~~ ~~display~~ source code of a software program, display on the display device a first function call ~~wherein the source code is~~ written in a text-based programming language that can be compiled into executable code, wherein the ~~source code includes a~~ first function call ~~that~~ takes a first parameter;

programmatically ~~dynamically~~ determine ~~a plurality of~~ one or more valid parameter values for the first parameter of the first function call by invoking software for the measurement device in order to determine one or more resources of the measurement device, wherein each of the one or more valid parameter values represents a respective resource of the one or more resources;

position a cursor on the first function call displayed in the source code in response to user input;

in response to user input requesting to select a parameter value, determine that the cursor is positioned on the first function call and display a graphical user interface for selecting a parameter value for the first parameter of the first function call, wherein the graphical user interface ~~for selecting the parameter value~~ visually indicates the ~~plurality of~~ one or more valid parameter values; ~~, wherein the graphical user interface for selecting the parameter value is displayed concurrently with the source code;~~

receive user input to the graphical user interface to select a first parameter value from the ~~plurality of~~ one or more valid parameter values, wherein the first parameter value represents a first resource of the measurement device; and

automatically modify the first function call displayed in the source code of the software program by including ~~include~~ the first parameter value in the first function call ~~in the source code of the software program~~ in response to the user input selecting the first parameter value, wherein automatically including the first parameter value in the first

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function call ~~comprises automatically updating the displayed source code to display the first parameter value within the first function call, wherein automatically including the first parameter value in the first function call~~ aids a user in ~~editing~~ modifying the first function call to reference the first resource of the measurement device.

27.   (Currently Amended) A method ~~for modifying source code of a software program, the method~~ comprising:

in ~~display~~ source code of a software program, displaying a first function call ~~wherein the source code is~~ written in a text-based programming language that can be compiled into executable code, wherein the ~~source code includes a~~ first function call ~~that~~ takes a first parameter;

programmatically ~~dynamically~~ determining ~~a plurality of~~ one or more valid parameter values for the first parameter of the first function call by invoking an application programming interface (API) of manager software for a measurement device in order to determine one or more resources of the measurement device, wherein each of the one or more valid parameter values represents a respective resource of the one or more resources;

positioning a cursor on the first function call displayed in the source code in response to user input;

in response to user input requesting to select a parameter value, determining that the cursor is positioned on the first function call and displaying a graphical user interface for selecting a parameter value for the first parameter of the first function call, wherein the graphical user interface ~~for selecting the parameter value~~ visually indicates the ~~plurality of~~ one or more valid parameter values; ~~, wherein the graphical user interface for selecting the parameter value is displayed concurrently with the source code;~~

receiving user input to the graphical user interface to select a first parameter value from the ~~plurality of~~ one or more valid parameter values, wherein the first parameter value represents a first resource of the measurement device; and

automatically modify the first function call displayed in the source code of the software program by including ~~include~~ the first parameter value in the first function call ~~in the source code of the software program~~ in response to the user input selecting the first

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parameter value, wherein automatically including the first parameter value in the first function call ~~comprises automatically updating the displayed source code to display the first parameter value within the first function call, wherein automatically including the first parameter value in the first function call~~ aids a user in ~~editing~~ modifying the first function call to reference the first resource of the measurement device.

28-30. (Canceled)

31. (Currently Amended) A computer-readable memory medium storing ~~comprising~~ program instructions executable to:

display a block diagram of a graphical program, wherein the block diagram includes a plurality of interconnected nodes visually indicating functionality of the graphical program, wherein the block diagram can be compiled into executable code, wherein the plurality of interconnected nodes includes a first node that takes a first input parameter;

programmatically ~~dynamically~~ determine ~~a plurality of~~ one or more valid parameter values for the first input parameter of the first node by invoking software for a measurement device in order to determine one or more resources of the measurement device, wherein each of the one or more valid parameter values represents a respective resource of the one or more resources;

display a graphical user interface for selecting a parameter value for the first input parameter of the first node, wherein the graphical user interface for selecting the parameter value visually indicates the ~~plurality of~~ one or more valid parameter values; ~~;~~ ~~wherein the graphical user interface for selecting the parameter value is displayed concurrently with the block diagram;~~

receive user input to the graphical user interface to select a first parameter value from the ~~plurality of~~ one or more valid parameter values, wherein the first parameter value represents a first resource of the measurement device; and

automatically configure the first node with the first parameter value in response to the user input selecting the first parameter value, wherein automatically configuring the first node with the first parameter value comprises automatically updating the displayed

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block diagram to visually indicate that the first node receives the first parameter value as input.

32.   (Previously Presented) The computer-readable memory medium of claim 31,

wherein automatically configuring the first node with the first parameter value comprises automatically wiring the first parameter value to an input terminal of the first node;

wherein updating the block diagram comprises displaying a wire connecting the first parameter value to the input terminal of the first node.